

✓ 9. An electrical connector comprising:

11. An electrical connector as recited in claim 9, further comprising: an insulative divider separating one of the

5 radiate heat from electrical power dissipation, and the fingers extending parallel to the contacts.

10 encircles the housing, a front edge of the shielding being closer to the front edge of the housing than the contacts.

13. An electrical connector as recited in claim 9, wherein, front tips of the contacts are recessed from a front edge of the housing, and the wiping surfaces are interposed between the tips of the contacts and the front edge of the housing.

15 14. An electrical connector as recited in claim 9, wherein the wiping surfaces cover front tips of the contacts.

15. An electrical connector as recited in claim 9, wherein the wiping surfaces are ramps.

16. An electrical connector comprising: an insulative housing, conductive contacts within an interior of the housing, wiping surfaces on a mating end of the housing, conductive surfaces on the contacts being offset laterally of the wiping surfaces and being rearward of the wiping surfaces to engage mating contacts of another, mating connector which mating contacts pass the wiping surfaces prior to engagement with the conductive surfaces, and a conductive shield surrounding the mating end of the housing, the wiping surfaces being closer to the shield than the contacts, and the conductive surfaces being raised with respect to edge margins of the contacts received in grooves in the housing.

17. An electrical connector as recited in claim 9 wherein, the conductive surfaces on each contact are between edge margins on each contact, and the wiping surfaces are offset 35 from the conductive surface areas on the contacts, and are in alignment with the edge margins on the contacts.

18. An electrical connector as recited in claim 1 wherein the conductive surfaces on each contact are between edge margins on each contact, and the wiping surfaces are offset from the conductive surfaces on the contacts, and are in alignment with the edge margins on the contacts.

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19. Mateable electrical connectors comprising:
a first electrical connector having an insulative
housing which carries signal contacts and power
contacts;
5 each power contact having a body portion and
contact fingers extending therefrom in an opposed
relationship, the contact fingers further having
resiliently deflectable bowed portions;
a second electrical connector having an insulative
10 housing which carries mating signal contacts and mating
power contacts for mating with the signal contacts and
power contacts, respectively, of the first electrical
connector;
the mating power contacts receiving the contact
15 fingers of the power contacts of the first connector
therein, whereby the contact fingers deflect inwardly
upon mating.
20. The mateable electrical connectors of claim 19,
20 wherein the first power contact and the second power
contact have lances to retain them in their respective
insulative housing.
21. The mateable electrical connectors of claim 19,
25 wherein the first power contact and the second power
contact have a surface area sufficiently broad to
radiate heat resulting from electrical power
dissipation.
- 30 22. The mateable electrical connectors of claim 21,
wherein the first power contact and the second power
contact are of greater mass than the signal contacts in
order to carry greater electrical current and thereby

limit the temperature of the first power contact and the second power contact.

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5 23. Mateable electrical connectors comprising:
a first and a second electrical connector having
mateable signal contacts and at least one first power
contact mateable with at least one second power contact;
the first power contact having opposed contact
fingers extending from a first body portion and the
10 second power contact having opposed contact surfaces;
wherein the opposed contact fingers of the first
power contact are received between the opposed contact
surfaces of the second power contact such that the
contact fingers resiliently deflect inwardly and exert
15 pressure on the opposed contact surfaces.

24. The mateable electrical connectors of claim 23,
wherein the first power contact and the second power
contact have a surface area sufficiently broad to
20 radiate heat resulting from electrical power
dissipation.

25. The mateable electrical connectors of claim 24,
wherein the first power contact and the second power
25 contact have a greater mass than the signal contacts in
order to carry greater electrical current and thereby
limit the temperature of the first power contact and the
second power contact.

30 26. The mateable electrical connectors of claim 23,
wherein the first power contact and the second power
contact have lances which retain them in the first
electrical connector and second electrical connector,

respectively.

✓27. Mateable electrical connectors, comprising:

5 a first electrical connector having at least one

first power contact; and

a second electrical connector having at least one

second power contact mateable with the at least one

first power contact;

10 the at least one first power contact having a body

portion with opposed contact fingers extending

therefrom, thereby providing a surface area sufficiently

broad to radiate heat resulting from electrical power

dissipation;

15 the at least one second power contact having

opposed contact surfaces, thereby also providing a

surface area sufficiently broad to radiate heat

resulting from electrical power dissipation;

20 wherein upon mating the first electrical connector

with the second electrical connector, the contact

fingers deflect inwardly upon insertion between the

opposed contact surfaces, thereby exerting force against

the opposed contact surfaces.

28. The mateable electrical connectors of claim 27,

25 wherein the contact fingers have outwardly bowed

portions.

29. The mateable electrical connectors of claim 27,

wherein the at least one first power contact and the at

30 least one second power contact have lances which retain

them within the first electrical connector and the

second electrical connector, respectively.

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30. An electrical connector comprising:
an insulative housing carrying signal contacts and
power contacts,
the power contacts having opposed contact fingers
which extend from a body portion, the opposed contact
fingers being inwardly deflectable upon mating within a
mating power contact of a mating electrical connector,
wherein the power contacts have a surface area
greater than a surface area of the signal contacts in
order to effectively radiate heat resulting from
electrical power dissipation.

31. The electrical connector of claim 30, wherein the contact fingers have outwardly bowed portions.

32. The electrical connector of claim 30, wherein
termination portions are provided on the body portion.

20 33. The electrical connector of claim 30, wherein the power contacts have lances to retain the power contacts within the insulative housing.

34. The electrical connector of claim 30, wherein the power contacts have a greater mass than the signal contacts in order to more carry greater electrical current and thereby limit the temperature of the power contacts.

35. An electrical connector comprising:
an insulative housing having signal contacts and
power contacts,
the power contacts having opposed contact surfaces
for receiving deflectable contact fingers of a mating

power contact of a mating electrical connector
therebetween,

5 wherein the power contacts have a surface area
greater than a surface area of the signal contacts in
order to effectively radiate heat resulting from
electrical power dissipation.

10 36. The electrical connector of claim 35, wherein the
power contacts have lances to retain the power contacts
within the insulative housing.

15 37. The electrical connector of claim 35, wherein the
power contacts have a greater mass than the signal
contacts in order to carry greater electrical current
and thereby limit the temperature of the power contacts.

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